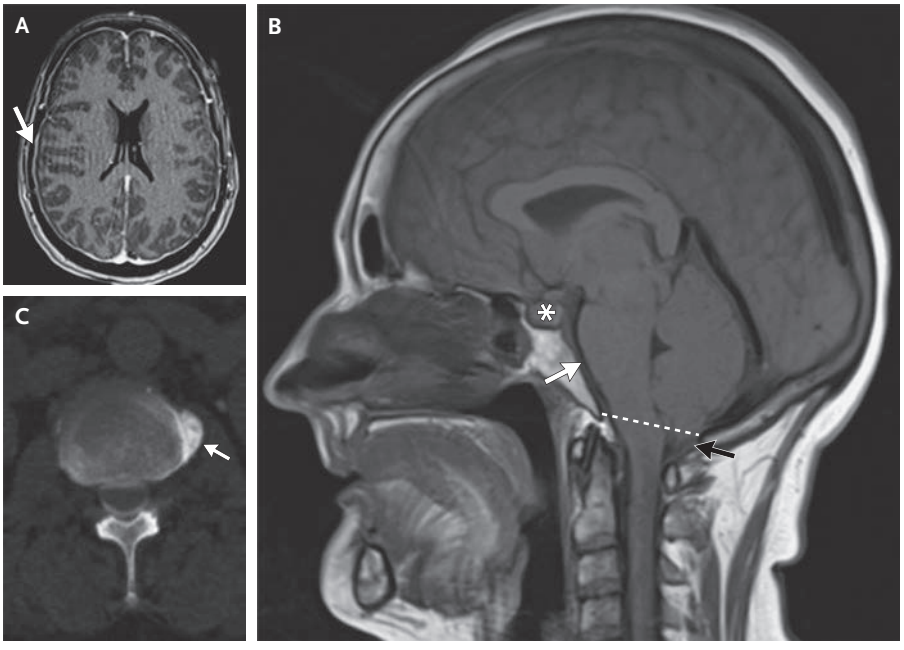
IMAGES IN CLINICAL MEDICINE

Spontaneous Intracranial Hypotension



A 50-year-old woman presented to the emergency department with a 10-day history of a throbbing headache that had started suddenly after she felt a "pop" in her back. The headache worsened when she was upright and abated when she lay flat. A physical examination, including funduscopy, was normal. Magnetic resonance imaging (MRI) of the brain showed diffuse pachymeningeal enhancement (Panel A, arrow [axial view, T1 sequence with contrast material]). MRI also showed protrusion of the cerebellar tonsils (Panel B, black arrow and dashed line) into the foramen magnum (tonsillar ectopia), flattening of the pons with effacement of the prepontine cistern (Panel B, white arrow), and enlargement of the pituitary gland owing to increased blood flow (pituitary hyperemia; Panel B, asterisk [T1 sequence without contrast material]). Owing to concern about spontaneous intracranial hypotension, a computed tomographic myelogram was obtained to detect a cerebrospinal fluid (CSF) leak. An extradural leak was identified on the ventral surface of the spinal cord at the T12–L1 intervertebral space (Panel C, arrow) and attributed to an osteophyte at the same level. A diagnosis of spontaneous intracranial hypotension — a condition of postural headache that results from sagging of the brain owing to a noniatrogenic CSF leak — was made. Treatment with an epidural blood patch was administered, whereupon the patient's headache resolved.

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